REMARKS

Summary Of The Office Action

Claims 1-41 are pending in the application.

Claims 1-23, 26-27, 30, 34 and 37 have been withdrawn from consideration.

Claim 29 is rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement.

Claim 24 is rejected under 35 U.S.C. § 102(e) as being anticipated by Oshima et al (USP 5,600,672).

Claims 28 and 35-36 are rejected under 35 U.S.C. § 102(e) as being anticipated by Anderson et al (USP 5,251,033).

Applicant respectfully traverses these rejections.

Analysis of the Claim Rejections

In rejecting claim 29 under 35 U.S.C. § 112, first paragraph, the Examiner states that the feature wherein the "sampled symbol sequence is surrounded by a plurality of non-variant symbols" was not described in the specification. Applicant submits that this is an inherent feature of the VSB HDTV signal.

In rejecting claim 24 as being anticipated by Oshima et al, the Examiner refers to Fig. 178, element 1041 and col. 61, lines 37-50, as teaching "identifying a direct current component of a received signal." However, element 1041 of Fig. 178 is an interference detector which

examines interference of an analog signal in a detected signal and makes a comparison with stored interference patterns for identification. When the interference detector finds an increase of the interference of the intercepted signal resulting from the frequency offset at the transmitter side, it causes the carrier offset detector 1044 to produce and transmit a command signal via the AFC detector 1043 to the tuner 752 for changing its local oscillation frequency (see col. 61, lines 37-50). Neither this portion or other portions of Oshima et al teaches the claimed "identifying a direct current (DC) component of a received signal."

Similarly, the cited portion of Oshima et al does not disclose the claimed "controlling the operating mode of the equalizer in response to the identification of the direct current (DC) component of said received signal"; the claimed "wherein the received signal at times comprises multi-level symbols representing data and a field synchronizing signal, said symbols being characterized by being accompanied by a substantially constant direct current (DC) offset component, and at other times comprises multi-level symbols representing data and being characterized by not being accompanied by said substantially constant direct current (DC) offset component"; the claimed "determining whether or not said received signal is currently accompanied by said substantially constant direct current (DC) offset component"; the claimed "calculating desired spectral response for said equalizer using at least a portion of said field synchronizing signal as a training signal, in response to it being determined that the direct current (DC) level said received signal is currently accompanied by said substantially constant direct current (DC) offset component"; or the claimed "establishing desired spectral response for said equalizer other than from calculations using at least a portion of said field synchronizing signal

as a training signal, in response to it being determined that said received signal is currently unaccompanied by said substantially constant direct current (DC) offset component."

Turning to the rejection of claims 28 and 35-36 under 35 U.S.C. § 102(e) as being anticipated by Anderson et al, in rejecting claim 28 as being anticipated by Anderson et al, the Examiner refers to Fig. 1, element 24, col. 3, lines 24-40, Figs. 3-4, element 24, col. 4, lines 1-56, as teaching the claimed feature of controlling the operation mode of the equalizer in response to the determined variation, during an interval of time, of the direct current (DC) level of a received signal. Applicant respectfully submits that Anderson et al does not teach this claimed feature.

In more detail, Anderson et al has a unit 24 which produces a function $G(\omega)$ which includes 256 coefficients which are applied to inverse FFT unit 28. Unit 28 develops the function g(t) comprising 256 coefficients. These coefficients correspond to the tap weight of a 256 tap equalizing transversal filter 30 which will correct for transmission channel distortions. Difference unit 20 determines the difference between the average value (i.e., the DC value) of the 256 samples from unit 16, and the average value during horizontal blanking intervals, and produces a DC difference representative signal DC DIFF.

FFT unit 28 produces 256 transformed coefficients representing the frequency content of the transformed signal. One of the coefficients represents a DC value of the transformed signal. However, this coefficient is not utilized, rather, the DC DIFF difference developed by unit 20 is substituted for this coefficient. The remaining 255 coefficients developed by unit 18 and the DC

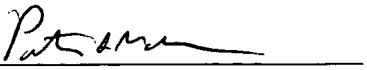
DIFF difference representative signal from unit 20 are applied to unit 24. Thus, the DC response of the signal to be equalized is separately calculated independently of the FFT unit.

In view of the above, Applicant submits that Anderson et al merely teaches accurately detecting the DC level so as to accurately set the DC gain of the equalizer. Anderson et al does not teach controlling the operating mode of the equalizer in response to the determined variation, during an interval of time, of the direct current (DC) level of a received signal, as required by claim 28. At least for this reason, Applicant submits that claim 28 is patentable over Anderson et al. Similar arguments apply to claim 35 and its dependent claim 36.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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23373
CUSTOMER NUMBER

Date: October 10, 2006